

## REMARKS

This is a full and timely response to the outstanding nonfinal Office Action mailed November 18, 2003. Reconsideration and allowance of the application and presently pending claims 1-18 and 20-22, as amended, are respectfully requested.

### 1. Present Status of Patent Application

Upon entry of the amendments in this response, claims 1-18 and 20-22 remain pending in the present application. More specifically, claims 1 and 13 are directly amended, claims 20-22 are added, while claim 19 has been canceled. These amendments are specifically described hereinafter. It is believed that the foregoing amendments and additions add no new matter to the present application.

### 2. Response to Rejection of Claims 1 – 7, 9 – 17 and 19 Under 35 U.S.C. §103(a)

In the Office Action, claims 1-7, 9-17 and 19 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Iwai et al.* (U.S. Patent 5,670,885), in view of *Haas, Jr. et al.* (U.S. Patent 5,392,185) and *Huard* (U.S. Patent 4,875,130). It is well established at law that, for a proper rejection of a claim under 35 U.S.C. §103 as being obvious based upon a combination of references, the cited combination of references must disclose, teach, or suggest, either implicitly or explicitly, all elements/features/steps of the claim at issue. See, e.g., *In Re Dow Chemical*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988), and *In re Keller*, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981).

a. Claim 1

Applicant respectfully submits that independent claim 1, as amended, is allowable for at least the reason that the proposed combination of *Iwai* in view of *Haas, Jr.* and *Huard* does not disclose, teach, or suggest anywhere in the proposed combination of the specifications or in the figures at least the feature of “the capacitance between the base and the emitter being about ten times less than the parasitic capacitance between the collector and the substrate” as recited in claim 1. That is, one embodiment of the present invention, as recited in claim 1, allows the user to create a ESD protection circuit using a transistor with a base-emitter capacitance being approximately ten times lower than a parasitic capacitance between the collector and the substrate ( $C_{js}$ ).

Applicant believes that the proposed combination of *Iwai* in view of *Haas, Jr.* and *Huard* does not disclose, teach, or suggest anywhere in the proposed combination of the specifications or in the figures using at least a transistor having a base-to-emitter capacitance of about ten times less than the collector-to-substrate parasitic capacitance. Applicant respectfully asserts that that the proposed combination of *Iwai* in view of *Haas, Jr.* and *Huard* does not address parasitic capacitance within the text of any of the references. Therefore, Applicant respectfully asserts that it cannot be shown that the base-to-emitter capacitance of any of the ESD protection circuits of *Iwai*, *Haas, Jr.*, or *Huard* is ten times less than the capacitance of the collector-to-substrate parasitic capacitance. Thus, claim 1 is not obvious under proposed combination of *Iwai* in view of *Haas, Jr.* and *Huard*, and the rejection should be withdrawn.

b. Claims 2-12

Furthermore, because independent claim 1 is believed to be allowable over the prior art of record, dependent claims 2-12 (which depend from independent claim 1) are allowable as a matter of law for at least the reason that the dependent claims 2-12 contain all features/elements of independent claim 1. See, *e.g.*, *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

c. Claim 13

Applicant respectfully submits that independent claim 13, as amended, is allowable for at least the reason that the proposed combination of *Iwai* in view of *Haas, Jr.* and *Huard* does not disclose, teach, or suggest anywhere in the proposed combination of the specifications or in the figures at least the feature of “coupling said transistor between the circuit operating at a frequency above about 1 GHz and a pad coupled to the circuit” as recited in claim 13. That is, one embodiment of the present invention, as recited in claim 13, allows the user to create ESD protection for a circuit operating at above about 1 GHz using a transistor connected in reverse mode between a transmission line and ground.

Applicant believes that the proposed combination of *Iwai* in view of *Haas, Jr.* and *Huard* does not disclose, teach, or suggest anywhere in the proposed combination of the specifications or in the figures using a transistor coupled in reverse mode on a circuit operating above about 1 GHz. Applicant respectfully asserts that the proposed combination of *Iwai* in view of *Haas, Jr.* and *Huard* is tenuous. It would appear that the Office Action position is that one ESD protection circuit which can operate at radio frequency renders it obvious to use a different ESD protection circuit at radio frequency. Applicant respectfully asserts that this conclusion is provided without support from the cited reference(s) and

would not be recognized by those skilled in the art. Thus, claim 13 is not obvious under proposed combination of *Iwai* in view of *Haas, Jr.* and *Huard*, and the rejection should be withdrawn.

d. Claims 13-18

Furthermore, because independent claim 13 is believed to be allowable over the prior art of record, dependent claims 14-18 (which depend from independent claim 13) are allowable as a matter of law for at least the reason that the dependent claims 13-18 contain all features/steps of independent claim 13. See, *e.g.*, *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

3. Newly Added Claims 20-22

a. Claim 20

Applicant respectfully submits that independent claim 20, is allowable for at least the reason that the proposed combination of *Iwai* in view of *Haas, Jr.* and *Huard* does not disclose, teach, or suggest anywhere in the proposed combination of the specifications or in the figures at least the feature of “operating the bipolar junction transistor in reverse mode between a transmission line and ground to protect the circuit operating at a frequency above approximately 1 GHz from electrostatic discharge” as recited in claim 20. That is, one embodiment of the present invention, as recited in claim 20, allows the user to use a transistor coupled in reverse mode to provide ESD protection for a circuit operating above about 1 GHz.

Applicant believes that the proposed combination of *Iwai* in view of *Haas, Jr.* and *Huard* does not disclose, teach, or suggest anywhere in the proposed combination of the

specifications or in the figures using a transistor coupled in reverse mode to provide ESD protection to a circuit operating above about 1 GHz. Applicant respectfully asserts that the proposed combination of *Iwai* in view of *Haas, Jr.* and *Huard* is tenuous. It would appear that the Office Action position is that one ESD protection circuit which can operate at radio frequency (*Haas, Jr.*) renders it obvious to use a different ESD protection circuit (*Iwai*) at radio frequency. Applicant respectfully asserts that this conclusion is provided without support from the cited reference(s) and would not be recognized by those skilled in the art. Applicant respectfully asserts that one skilled in the art would not be motivated by the ESD protection of *Haas, Jr.* to use a circuit not designed for high frequency use in a high frequency application. Thus, claim 20 is not obvious under proposed combination of *Iwai* in view of *Haas, Jr.* and *Huard*, and the rejection should be withdrawn.

b. Claims 20 and 21

Furthermore, because independent claim 20 is believed to be allowable over the prior art of record, dependent claims 20 and 21 (which depend from independent claim 20) are allowable as a matter of law for at least the reason that the dependent claims 20 and 21 contain all features/steps of independent claim 20. See, e.g., *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

### CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicant respectfully asserts that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims 1-18 and 20-22 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,

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